# 2024-2025 COURSES AT IRVINGTON HIGH



# **Anatomy and Physiology (74007)**

#### UC "d" Credit | Ohlone College Credit

Students will learn the study of body systems and basic medical terminology. Lab skills will include dissections and career-specific skills (blood pressure, vision screening, etc.)

#### **Culinary Arts 1 (74170)**

#### UC "g" Credit | Mission College Credit

This competency-based course introduces the Hospitality and Food Service Industry. Included in the course are food safety and sanitation, basic culinary terms, hospitality standards, knife skills, fundamentals of cooking techniques, pantry, soups, and basic pastry. Throughout the course are career preparation standards. Students earn Food Handlers Certification.

# Cyber Security (74185)

#### UC "g" Credit

Prerequisite: Internet Engineering 1 recommended This course introduces core security concepts and skills needed to monitor, detect, analyze and respond to cybercrime, cyberespionage, insider threats, advanced persistent threats, regulatory requirements, and other cybersecurity issues facing organizations. It emphasizes the practical application of the skills needed to maintain and ensure the security operational readiness of secure networked systems.

#### **Digital Imaging (74240)**

# UC "f" Credit | Ohlone College Credit may be available

Students use digital tools and technologies as art and design mediums to visually articulate thoughts, ideas, and experiences. Technologies include digital painting, drawing, compositing, and graphic design.

#### **Digital Photography 1, 2 (74200/74201)** UC "f" Credit | Mission College Credit for Year 1

The study of digital photography encourages conceptual thinking and creativity. Explore hands-on digital photography fundamentals including Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing.

## Entrepreneurship (74281)

# UC "g" Credit | Mission College Credit

Students will learn what it takes to be an entrepreneur, including recognizing and evaluating a business opportunity. Students will expand their critical thinking, problem-solving, communication, and business skills through practice. Team and individual projects incorporate accounting, finance, marketing, operations, management, and understanding legal and economic environments. Students will develop and present a business plan. The curriculum is designed to help students explore entrepreneurship as a career pathway and provide a realistic framework for starting a new business. This course is recommended for 11th/12th-grade students.

# **Entrepreneurial Marketing (74282)**

## UC "g" Credit

Prerequisite: Entrepreneurship In this capstone course students will understand the fundamentals of marketing and its importance to small businesses. This course focuses on essential ideas including identifying markets, the 4 P's (product, price, place & promotion), ethical practices, and the development of a marketing plan building on plans developed in Entrepreneurship. The class will include career exploration and concepts of retail sales, business presentations, business management, and political influences. Students will need to follow oral and written directions, work well in groups, anddirections, work well in groups, and demonstrate good work habits to be successful in the course.

## **Internet Engineering 1 (74370)** UC "g" Credit | Ohlone College Credit

This course introduces the architectures, models, protocols, and networking devices, applications, and data used in today's modern computer networks - including IP addressing and Ethernet fundamentals. Students will build and configure simple local area networks (LANs), including foundational network security.

#### **Internet Engineering 2 (74380)**

#### UC "g" Credit | Ohlone College Credit

Prerequisite: Internet Engineering 1 recommended This course focuses on switching technologies and router operations that support small-to-medium business networks, wireless local area networks (WLANs), and security concepts. Students learn key switching and routing concepts, network configuration and troubleshooting, and identify and mitigate LAN/WLAN security threats.

#### Introduction to Computer Support (74130)

This semester course introduces the fundamentals of computer systems, operating systems, cybersecurity, and networking devices that form the backbone of the Internet of Things (IoT). A thorough introduction to cybersecurity exploring the characteristics and tactics used by cyber criminals and tools used by cybersecurity professionals to combat cybercrime.

## Introduction to Engineering and Design-PLTW (74209) UC "g" or "f" Credit

This Project Lead the Way (PLTW) course will expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. Students will make models and use 3D solid modeling design software to help them design solutions to solve proposed problems and will learn how to document their work and communicate solutions to peers and members of the professional community.

# Principles of Engineering-PLTW (74213) UC "d" Credit | Las Positas College Credit

This survey course of engineering exposes students to major concepts they'll encounter in a postsecondary engineering course of study. Students employ engineering and scientific concepts in the solution of engineering design problems. They build on what is learned in IED to develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, documenting their work and communicating solutions to peers and members of the professional community.





